



# Academic Curriculum Vitae

## Personal Information:

Full Name: Prof. Dr. Eng. Ramzi Raphael Ibraheem Barwari

**Ph.D./THERMAL POWER/AIR CONDITIONING & REFRIGERATION**

**ACADEMIC TITLE: PROFESOR**

**AREA OF INTEREST:** AIR CONDITIONING & REFRIGERATION, FLUIDS, HEATS, HEAT TRANSFER, INTERNAL COMBUSTION ENGINE, AUTOMOBILE ENGINEERING, THERMODYNAMICS, POWER PLANTS.



Academic Title: **PROFESOR**

Email: (university email) ramzi.ibraheem@su.edu.krd

Mobile: 009647504349609

## Education:

### ACADEMIC QUALIFICATIONS:

- 1975–1979 Bachelor –University of Technology/ Baghdad
- 1980-1981 High Diploma-University of Technology/ Baghdad
- 1982 - 1983 Master – University of Technology/ Baghdad
- 2000 - 2004 PhD –University of Technology/ Baghdad

### *High Diploma Thesis*

Title: **Study on the effect of roughness on the rate of evaporation.**

Supervisor: Prof. Dr. Mohammad S. Hameed.

### *M.Sc. Thesis:*

Title: **Effect of Surface Roughness on Heat Transfer.**

Supervisor: Prof. Dr. Mohammad S. Hammed.

### *PhD. Thesis:*

Title: **Experimental Study on the Thermodynamic Properties of Vortex Tubes with a Divergent Chamber.**

Supervisor: Prof. Dr. J.M. Salim.

# Employment:

## *Academic Titles Attained*

- 1985–1986 Chief Mechanical power Branch in institute of Technology Baghdad.
- 1986-1987 Manager Registration in institute of Technology Baghdad.
- 1987-1988 Sabbatical at the Ministry of Labor and Social Affairs,

Provide in field of Refrigeration and Air Conditioning Equipment and Study the reality of business circles in the Kurdistan region.

- 1995 - 2000 Chief Automobiles Branch in institute of Technology Baghdad.
- 2003-2006 Chief Automobiles Branch in institute of Technology Baghdad.
- 1985-2007 Lecturer in institute of Technology Baghdad, University of Technology & Technical College-Baghdad.
- 2000-2003 Lecturer in University of AL- Anbar Iraq.
- 1-12-2007 to present Lecturer in University of Salahaddin-Howler.

# Qualifications

- **PROFESSIONAL QUALIFICATION/MEMBERSHIP/AFFILIATION:**
  - 1-Member of the Committee granted Technical titles in the Technical Education-Baghdad (1995-2000).
  - 2-Member of the Committee awarded titles for craftsmen in the institute of Technology-Baghdad (1997-2000).
  - 3-Member of the Examination Committee in the institute of Technology-Mechanical Department Baghdad.(1988-1998).
  - 4-A member of the Iraqi Society of Engineers from 1979 until today.
  - 5-Advisory member of the Iraqi Engineers Association from 1979 until today.
  - 6-Advisory member in Kurdistan Engineering Union from 2008 until today.
  - 7-Member of the Teachers union in Kurdistan from 2008 until today.
  - 8-Member in Chaldean Culture Society from 2008 until today.
  - 9-Member in Social Academic Center from 2008 until today.
  - 10-Member of the Committee to ensure the quality of education in the section.(2011).
  - 11-Founder Member of the Association Hydiab for Culture and Science (2012).
  - 12-One of the founders of the Engineering Consulting Office, Cihan University - Erbil 2018

- **TEACHING EXPERIENCE**

- **1-Under- Graduate Level Courses**

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- I have Thirty five years' experience in Education Field and taught the following:
- Courses:
  - 1-Steam power plant for 2<sup>nd</sup> year Institute of Technology Baghdad- Mechanical Department /Mechanical power Branch from 1985 to 1990.
  - 2-Internal Combustion Engine for 2<sup>nd</sup> year Institute of Technology Baghdad- Mechanical Department/ Automobile Branch From 1990 to 2007.

- 3- Thermodynamics for 1<sup>st</sup> year Institute of Technology Baghdad Mechanical Department / Automobile Branch From 1990 to 1999.
- 4- Thermodynamics for 1<sup>st</sup> year Institute of Technology Baghdad - Mechanical Department/ Refrigeration & Air Conditioning Branch From 1990 to 1995.
- 5- Steam power Plant for 4<sup>th</sup> year University of Technology Baghdad- Mechanical Department/ Refrigeration & Air Conditioning Branch From (2000-2001).
- 6- Steam power Plant for 4<sup>th</sup> year Technical College Baghdad- Mechanical Department/ Refrigeration & Air Conditioning Branch From (1999-2002).
- 7- Heat Transfer for 3<sup>th</sup> year Technical College Baghdad- Mechanical Department/ Automobile Branch (2000-2003).
- 8- Heat Transfer for 3<sup>th</sup> year Technical College Baghdad- Mechanical Department/ Refrigeration & Air Conditioning Branch From (2000-2003)
- 9- Internal Combustion Engine for 3<sup>rd</sup> year Technical College Baghdad- Mechanical Department /Automobile Branch From (1996-2005).
- 10- Internal Combustion Engine for 3<sup>rd</sup> year University of AL- Anbar Engineering College Mechanical Engineering Department From (2001-2003)
- 11- Heat Transfer for 3<sup>rd</sup> year University of AL- Anbar Engineering College- Mechanical Engineering Department From (2001-2003)
- 12 -Internal Combustion Engine for 3<sup>rd</sup> year University of Salahaddin Engineering College Mechanical Engineering Department From (2008-2013).
- 13- Automotive Engineering for 4<sup>nd</sup> year University of Salahaddin Engineering College Mechanical Engineering Department From (2012-2023).
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- 14-Power Cycles for 4<sup>nd</sup> year University of Salahaddin Engineering College Mechanical Engineering Department From (2015-2023).
- 15- Final year Projects (Supervised 85 Final year project).
- 16- Fluid Machinery for 4<sup>nd</sup> year University of Salahaddin Engineering College Mechanical Engineering Department From (2019-2023).
- 17- Air conditioning University of Salahaddin Engineering College Architecture Engineering Department (2016-2023).
- 18- Air conditioning Cihan University Erbil, Engineering College Architecture Engineering Department (2016-2023).
- 19- Electrical (Building services) Cihan University Erbil, Engineering College Architecture Engineering Department (2016-2022).
- 20- Building Physics Cihan University Erbil, Engineering College Architecture Engineering Department (2016-2018).
- 21- Descriptive geometry Cihan University Erbil, Engineering College Architecture Engineering Department (2016-2018).
- 22- Air conditioning Catholic University Erbil, Engineering College Architecture Engineering Department (2022-2023).
- 23- Sanitary Catholic University Erbil, Engineering College Architecture Engineering Department (2022-2023).

## ▪ **2-Graduate level Courses: (M.Sc. &PhD)**

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- 1-Advanced Power Plants University of AL- Anbar Engineering College Mechanical Engineering Department from (2001-2003). **M.Sc.**
- 2-Advanced Thermodynamics University of AL- Anbar Engineering College Mechanical Engineering Department from (2001-2003). **M.Sc.**
- 3- Combustion& Advanced Power plants University of AL- Anbar Engineering College Mechanical Engineering Department From (2001-2003). **M.Sc.**
- 4-Advanced Internal Combustion Engine University of Salahaddin Engineering College Mechanical Engineering Department from (2008-2011). **M.Sc.**
- 5- Advanced Air conditioning University of Salahaddin Engineering College Mechanical Engineering Department (2014-2015). **M.Sc.**
- 6- Advanced Air conditioning University of Salahaddin Engineering College Mechanical Engineering Department (2015-2016). **M.Sc.**
- 7-Advanced Air conditioning University of Salahaddin Engineering College Mechanical Engineering Department (2017-2018). **M.Sc.**
- 8- Advanced Fluid mechanics University of Salahaddin Engineering College Mechanical Engineering Department (2016-2017). **PhD**
- 9- Advanced Air conditioning University of Salahaddin Engineering College Mechanical Engineering Department (2017-2018). **PhD**
- 10- **Advanced** Thermodynamics University of Salahaddin Engineering College Mechanical Engineering Department (2018-2019). **PhD**
- 11- Thermodynamics University of Salahaddin Engineering College Mechanical Engineering Department (2019-2020). **PhD**
- 12- Thermodynamics University of Salahaddin Engineering College Mechanical Engineering Department (2020-2021). **PhD**
- 13- **Advanced** Thermodynamics University of Salahaddin Engineering College Mechanical Engineering Department (2020-2021). **M.Sc.**
- 14- **Advanced** Turbo machinery University of Salahaddin Engineering College Mechanical Engineering Department (2020-2021). **M.Sc.**
- 15- **Advanced** Thermodynamics University of Soliamani Polytechnic University Engineering College -Mechanical Department (2020-2021). **M.Sc.**
- 16- Advanced Air conditioning University of Salahaddin Agriculture Engineering College (2020-2021). **M.Sc.**
- 17- Measurement & instruments University of Salahaddin Agriculture Engineering College (2020-2021). **M.Sc.**
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- Teaching qualifications
- IT qualifications
- Language qualifications such as TOEFL, IELTS or any equivalent
- Any professional qualification
- You could put any professional courses you have attended

## Teaching experience:

### Practical Experience

1-Maintenance Engineer (Refrigeration & Air Conditioning) Department of Engineering Affairs Presidential Palace Baghdad- From (1984-1985).

2-Partially Emptied one day per week in the Dora power station Baghdad (1986-1991).

3-Partially Emptied one day a week at a power station south of Baghdad (1986-1991).

4-Manufacturing Engineer designs in Manufacturing military Baghdad-from (1992-1994).

5- Engineer in Manufacturing military Baghdad-from (2000-2003).

6-Consulting Engineer at a power station south of Baghdad (2002-2003).

7-A Consulting Engineer in the Dora power station Baghdad (2002-2003).

8-A consulting Engineer in the General Company for car trade (2001-2003).

9- One of the founders of the university's engineering consulting office, Cihan university Erbil 2017-2023.

10-A training course at the University of Fiebrick in Germany for the period 10- 25 December-2012

## Research and publications

### International Journals

1- **Ramzi R.Ibraheem**, Hazim K. AL-Omishy and Ekhas M. Fayad 1993," The influence of

various factors on the fuel consumption of petrol – powered vehicles using A computer simulation model" Energy journal Vol. 18 No. 1 PP. ( 63 – 68 ) ( U.S.A ) California .

2-Nyas T, **Ramzi R.Ibraheem**, Ziyad J. 2011, "An experimental investigation of the geometric parameters on the performance of the counter flow vortex tube" .Global Journal of Engineering and Technology Vol.4 No.3 Calcutta, India.

3- **Ramzi R.Ibraheem**, Sherzad N.M.2013 "Study Performance of Forced Draft Counter Flow Cooling Tower " International Journal of Advances in Engineering Science and Technology Vol.2 No.2, India.

4- **Ramzi R. Ibraheem**, Hendiran M., **Ziyad** J. 2013, "Effect of Ambient Temperature before entering the Diesel Engine on the performance parameters". Journal of Science and Engineering (Vol.1, No1.) O R I C Publications, U.S.A.

5- **Ramzi R. Ibraheem**, Hassan A. Al. Wahab, Manaf Y. S. " Study of Piston Ring Dynamics during Operation of a Diesel Engine". Journal of Science and Engineering (Vol.2, No2.) 2013 O R I C Publications, U.S.A.

6- **Ramzi R. Ibraheem**, R. B. Wali, K. A. Abdulla "Water Pumping Using Solar Energy" Journal of Science and Engineering (Vol.3, No1.) 2013 O R I C Publications, U.S.A.

7- **Ramzi R. Al-Barwari**, Azhar K. M., Ziyad J. T., 2103- , " Experimental Study of Steady State Natural Convection Heat Transfer from Cylindrical Heater in a Vented Enclosure". Journal of Science and Engineering (Vol.2, No2.) O R I C Publications, U.S.A.

8- Barwari Ramzi Raphael Ibraheem & Zangana Lizan Mahmood Khorsheed, "Experimental study and CFD analysis of energy separation in a counter flow vortex tube Thermal Science 2019 Online-First Issue 00, Pages: 418-418

9-21- Ramzi Raphael Ibraheem Barwari & Lizan Mahmood Khorsheed Zangana

**THE EFFECT OF CONVERGENT-DIVERGENT TUBE ON THE COOLING CAPACITY OF VORTEX TUBE: AN EXPERIMENTAL AND NUMERICAL STUDY ALEXANDRIA ENGINEERING JOURNAL (ORIGINAL ARTICLE)**

Volume 59, Issue 1, February 2020, Pages 239-246.

10- Ramzi Raphael Ibraheem Barwari & Lizan Mahmood Khorsheed Zangana ENERGY SEPARATION IN A COUNTER-FLOW VORTEX TUBE: AN EXPERIMENTAL STUDY AND CFD ANALYSIS journal of Chinese society of mechanical engineers

Acceptance in February 2020.

11- , Ramzi Raphael Ibraheem Barwari<sup>2</sup>, Abdulrazzak Akroot<sup>1\*</sup> Tareq Aziz Dawood<sup>1</sup>

**Solar Energy and Factors Affecting the Efficiency and Performance of Panels in Erbil/Kurdistan International Journal of Heat and Technology**

Vol., No., Month, Year, pp. \*\*-\*\*

12- **CFD Simulation of Thermal Plume of VRF Air Conditioners for Cooling Season in Semi-Closed Spaces for Erbil Climate Conditions.** Ramzi Raphael Ibraheem Barwari

**Kawa Abdulghany Abdullah,**

13- Influence of intake air temperature on the performance of gasoline engines using a different type of fuel. **Ramzi Raphael Ibraheem Solin Kamal Muhammad<sup>a\*</sup>, Iyd Eqqab Maree<sup>b</sup>, and<sup>a</sup>** Al-Qadisiyah Journal for Engineering Sciences

## National journals

- 1 - **Ramzi R.Ibraheem**, M.S.Hamed 1989" Effect of surface roughness on heat transfer" Engineering and Technology journal-Baghdad Vol. 2 No. 1.
- 4- **Ramzi R.Ibraheem**, 1994"Comparison of two practical simulation models for urban air pollution". AL-Taqaanil journal Foundation of Technical Education Baghdad.
- 5- I.W.Maid, **Ramzi R.Ibraheem**, A.K.Mohamed 1996,"Two dimensional transient analysis of packed bed thermal storage systems. AL-Taqaanil journal Foundation of Technical Education Baghdad.
- 6- **Ramzi R.Ibraheem** I.W.Maid, A.K.Mohamed 2000," Theoretical and particle study for solar still". AL-Taqaanil journal Foundation of Technical Education Baghdad.
- 8- **Ramzi R.Ibraheem** 2000"Effect of thermal capacity of storage medium on thermal performance of packed bed ".AL-Taqaanil journal Foundation of Technical Education Baghdad.
- 7- **Ramzi R.Ibraheem** I.W.Maid, A.K.Mohamed 2001" Research review for turbulent heat transfer from a rough surface". AL-Taqaanil journal Foundation of Technical Education Baghdad.
- 9- I.W.Maid, **Ramzi R.Ibraheem**, A.T.ALOmran, 2002" Numerical solution of heat conduction in a solid spherical ball". AL-Taqaanil journal Foundation of Technical Education Baghdad.
- 10-رمزي روفائيل ابراهيم 2003 "امكانية فصل جزيئات الكربون من زيوت محركات البنزين المستعملة نوع (الرشيد) واعادة استعمالها في الاجزاء الميكانيكة غير محركات الاحتراق الداخلي" . مجلة التقني -هيئة التعليم التقني بغداد.
- 11- **Ramzi R.Ibraheem**, A.T.ALOmran, 2005," Effect of the cold outlet diameter on the performance of divergent vortex tube". AL-Taqaanil journal Foundation of Technical Education Baghdad. Vol. 18, No.2.
- 12- **Ramzi R.Ibraheem**, A.T.ALOmran 2008," Study the effect of the outlet nozzle diameter on the performance if divergent vortex tube" Baghdad University – Engineering journal No. 2.
- 13- **Ramzi R.Ibraheem**, A.T.ALOmran 2008,"The effect of changing the inner tube diameter on the performance of uni – flow vortex tube". University of technology. Engineering and Technology journal Baghdad.
- 14-Halo A. Ahmed, Ziyad J, **Ramzi R.Ibraheem** 2010," Thermal performance of cross flow heat exchange ".Zanco Journal Vol. No.22 Erbil.
- 15- - **Ramzi R.Ibraheem** The effect of changing internal tube diameter on the performance of uniflow vortex tube , Scientific Journal of Engineering and Technology Baghdad2008, 12, No. 26 .
- 16-Ramzi R. Ibrahim, Kawa A. Abdullah, Effect of Ambient Air Temperature on the Performance of Petrol Engine, Journal of Engineering Sciences Vol. 12, No. 01, Month 2019, pages 7-11 .
- 17- Dr.Eng.Ramzi R. Ibraheem Barwari , Sherzad N. Muhammad , **Experimental Study the Performance of Forced Draft Counter Flow cooling Tower,2016.**

[Polytechnic Journal - Erbil Polytechnic University](#)

18- Dr.Eng.Ramzi R. Ibraheem Barwari Effect of Changing Cone Valve Diameter on the performance of Uni-Flow Vortex Tube, 2017.

[Polytechnic Journal - Erbil Polytechnic University.](#)

19- Ramzi R. Ibraheem Saving Energy Using Local Available Insulation Materials in Erbil Academic Journal of Nawroz University (AJNU) 2018.

## Conference proceedings

1-Sixth International conference for Numerical Methods in laminar & Turbulent flow held at Swansea, 11<sup>th</sup> -15<sup>th</sup> July, 1989/ U.K.

2-Student Qualitative Research Conference Institute of Technology Baghdad-March 1988.

3-Student Qualitative Research Conference Institute of Technology Baghdad-March 1992.

4-Student Qualitative Research Conference Institute of Technology Baghdad-March 1994.

5-Fifth Scientific conference For Education Research Baghdad 1995.

6-Qater Scientific conference Eighteenth student Research Mosel Nineveh 1996.

7-First Conferences of Foundation of Technical Education Erbil in Duhok 2010.

8- ***Ramzi R. Ibraheem***, M.S.Hameed and A.R.Khan 1989," Mathematical model for turbulent heat transfer from rough surface "proceeding of the sixth international conference held a Swansea (U.K ) July Part 1 Vol. 6

9- PROVIDING ELECTRICITY IN RURAL AREAS USING WIND ENERGY

Ali Mahmood Ibrahim<sup>1</sup>, Ramzi R. Ibrahim<sup>2</sup> and Rizgar B. weli<sup>2</sup>

4<sup>th</sup> International Conference on Communication Engineering and Computer Science (CIC-COCOS'2022)

10-<https://ieeexplore.ieee.org/document/5598403>

11-[https://journal.csme.org.tw/vol\\_file.aspx?lang=en&fid=20210517151329](https://journal.csme.org.tw/vol_file.aspx?lang=en&fid=20210517151329)

## Thesis Supervision

- 1- An experimental investigation of the geometric parameters on the performance of the counter flow vortex tube. (MSc.) 2009.



**2 -Effect of Ambient Temperature before entering the Diesel Engine on the performance parameters. (MSc.) 2010.**

**3-Study Performance Of Forced Draft Counter Flow Cooling Tower.( High Diploma)2010.**

**4-Saving Energy Using Local Available Insulation Materials in Erbil (MSc.) 2017.**

**5- "Numerical and Experimental study of energy separation in Counter – flow Vortex tube"(Ph.D.) 2018.**

**6- Study Renewable Energy Resources with an Emphasis on Solar Power in Kurdistan- Iraq: An Outlook (MSc.) 2017.**

**7-Performance of Solar-Powered Air Conditioning System under Erbil Climatic Conditions"(Ph.D.) 2021.**

**8- CFD Simulation of Thermal Plume of VRF Systems for Cooling Season in Semi-Closed Spaces in High-Rise Building "(Ph.D.) 2021.**

## **Professional memberships**

<https://www.researchgate.net/profile/Ramzi-Ibraheem-2>

<https://scholar.google.com/citations?user=XLPZICEAAAAJ&hl=ar>

<https://www.facebook.com/ramzi.barwari.3>

<https://www.linkedin.com/in/ramzi-ibraheem-89617313a/>

<https://orcid.org/my-orcid?orcid=0000-0003-2498-3147>

[https://twitter.com/ramzi\\_ibraheem?fbclid=IwAR2He06YcKVcHrRYq7dhUz3291cF63yltYr6FpbOQwPxglv2sQLl6nGtq4w](https://twitter.com/ramzi_ibraheem?fbclid=IwAR2He06YcKVcHrRYq7dhUz3291cF63yltYr6FpbOQwPxglv2sQLl6nGtq4w)

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.ijeat.org/wp-content/uploads/2017/10/Abstarct\_Book\_IJEAT\_v4i2\_December%202014.pdf

<https://www.blueeyesintelligence.org/committee-2023/dr-ramzi-raphael-ibraheem-barwari/>  
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extension://efaidnbmnnnibpcajpcglclefindmkaj/http://eprints.cihanuniversity.edu.iq/438/1/Seminar\_CUE42005.pdf

<https://thermalscience.vinca.rs/authors/7702>

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.ijmh.org/wp-content/uploads/2017/08/Abstarct\_Book\_IJEAT\_v6i2\_December\_\_2016.pdf

<https://abcdindex.com/reviewer/prof-dr-eng-ramzi-raphael-ibraheem-barwari-000-051-992>

<https://ijsrmme.com/editorial.php>

<https://doiserbia.nb.rs/Article.aspx?id=0354-98361900418Z>

<https://irjiet.com/editorialboard>

<https://www.ijde.latticescipub.com/editorial-board/>

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<https://www.iieta.org/Journals/IJHT>

<https://upiqpbank.com/2018/10/10/interview-with-dr-ramzi-raphael-ibraheem-barwari/>

<https://www.sbs.com.au/language/assyrian/en/podcast-episode/a-workshop-on-documenting-genocide-held-in-erbil/h88w2xj50>

<https://scholar.google.com/citations?user=XLPZICEAAAAJ&hl=ar>

## Professional Social Network Accounts:

### Biography

Professor Dr. Eng. Ramzi Raphael Ibraheem Barwari.

Dr. Ramzi was a staff member in the Faculty of Engineering - Mechanical & Mechatronics Engineering Department, Salahaddin University -Erbil in Iraq, he was lecturing at the University of Technology Baghdad-Iraq, Technical Education, Institute of Technology and Technical Collage Baghdad-Iraq, Anbar university Mechanical Department, Engineering Collage-Iraq. lecture on Part-time contract with the Department of Architecture, the University of Cihan-Erbil University in 2016 as a professor, Dr. Ramzi earned his Ph.D. in Refrigeration and Air Conditioning Engineering/Thermal Power from - the University of Technology / Baghdad in 2004. He has B.Sc. in Mechanical Engineering from - the University of Technology / Baghdad (1979) and an M.Sc. in Thermal Power from - the University of Technology / Baghdad (1983). Thirty-Five years of experience in Education. Dr.Ramzi is a Member of the consultant in the Iraqi Society of Engineers from 1979 until today. Consultant Member of the Iraqi Engineers Association from 1979 till today. Member of the consultant in the Engineers Union - Kurdistan - from 2008 until today. Founder member of the Cihan Engineering Consultant Bureau. Contributing to a number of scientific seminars and conferences inside and outside Iraq. Supervising a number of thesis of high diploma, masters, and doctorate degrees. More than Thirty research papers are published in local and international scientific journals. Discussing a number of thesis's, high diplomas, and master's and doctorate degrees in various Iraqi universities.

